Claims

1. Method for measuring the pressure p in an eye, the so-called intraocular pressure, that includes a contact body with a known geometry, being pressed against the eye with a gradually increasing force F and that when the area of deformation of the eye A can be determined, the pressure can be obtained from the correlation, $P=F/A$ characterised in that the frequency characteristic of a contact body associated with a sensor system oscillating in resonance is read, that the contact body is pressed against the eye to form a new system oscillating in resonance, that the contact force and frequency characteristic for the new system is read, and that the change in frequency characteristic is calculated, whereby the pressure of the eye can then be determined since the deformation area A sought is a function of the change $A(f_{char})$.

2. Method according to claim 1 characterised in that the force with which the contact body is pressed against the eye is chosen depending on the pressure of the eye, so that a lower pressure is determined with a lower contact force against the eye and a higher pressure is determined with a higher contact force, whereby a high degree of measurement accuracy is obtained with a minimal contact force over a large pressure interval.

3. Method according to claim 1 characterised in that the frequency characteristic is read continuously, that the contact force F is increased until a desired change in the frequency characteristic f_{char} has been reached, that the contact force F is read and that the pressure is determined as a function of the contact force F at a specified change of frequency characteristic f_{char}.

4. Method according to claim 1 or 3 characterised in that repeated readings of the contact force F and frequency characteristic are made while the contact body is pressed against the eye, whereby a series of measurement values are obtained.

5. Method according to any of claims 1-4 characterised in that the frequency characteristic is described by one of either the change in resonance frequency f or the change in phase φ.

6. Device for measuring the internal pressure in an eye, the so-called intraocular pressure, having a contact body (4) for pressing against the eye (1) and a means (3) of determining the force with which the contact body is pressed against the eye, characterised in that the contact body (4) is part of a system oscillating in resonance, and that the resonance system is connected to a means (9) for reading the frequency characteristic of the system.

7. Device according to claim 6 c h a r a c t e r i s e d in that the system oscillating in resonance includes a piezo-electric element.

8. Device according to claim 6 or 7 c h a r a c t e r i s e d in that the contact body (4) has a flat surface of contact (5) and that the contact surface preferably has a structure or a pattern.

9. Device according to any of claims 6 to 8 c h a r a c t e r i s e d in that a means is arranged for calculating the change in frequency characteristic.

10. Device according to any of claims 6 or 7 c h a r a c t e r i s e d in that the contact surface (5) is concave, preferably with a radius of curvature that exceeds the radius of curvature of the surface of the eye against which it is intended to be pressed.

11. Use of the device according to claim 6 for measuring pulsation in the intraocular pressure.
